What is claimed is:

[Claim 1] 1. A laser assembly comprising:

a removable work table defining a planar work surface;

a frame configured for supporting the removable work table with the work surface in a work surface plane;

an X-Y beam transport operatively associated with the frame, the X-Y beam transport being configured to direct a laser beam from a laser beam source to X-Y coordinates relative to the frame; and

at least one clamp operatively associated between the frame and the removable work table having a clamping position for clamping the work table to the frame with the work surface in the work surface plane and a release position for removing the work table from the frame.

[Claim 2] 2. The laser assembly of claim 1 further comprising a first elongate clamp extending along the X axis and a second elongate clamp extending along the Y axis, the clamps being configured for clamping a corresponding edge of the removable work table.

[Claim 3] 3. The laser assembly of claim 2 further comprising a third elongate clamp extending parallel to the Y axis spaced from the second elongate clamp, the third elongate clamp being configured to clamp an edge of the removable work table opposite the edge clamped by the second elongate clamp.

[Claim 4] 4. The laser assembly of claim 2 further comprising measuring indicia on each of the first and second clamps in a substantially fixed orientation relative to the X-Y beam transport with each clamp in the clamping position.

[Claim 5] 5. The laser assembly of claim 1 further comprising a Z axis control mechanism operatively associated with the frame for moving the frame along a Z axis normal to the work surface plane relative to the X-Y beam transport.

[Claim 6] 6. The laser assembly of claim 1 further comprising a void underlying the removable work table, the void being operatively associated with the X-Y beam transport with the removable work table removed.

[Claim 7] 7. The laser assembly of claim 6 wherein the void is configured to receive a rotary attachment for a work piece.

[Claim 8] 8. The laser assembly of claim 1 wherein the removable work table comprises a planar open cell cutting platform and a planar perforated engraving plate, the planar perforated engraving plate being configured to overly the planar open cell cutting platform.

[Claim 9] 9. The laser assembly of claim 1 wherein the removable work table comprises a planar open cell cutting platform.

[Claim 10] 10. A laser assembly comprising:

a removable work table having a planar work surface;

a frame configured for supporting the removable work table with the planar work surface in a work surface plane;

an X-Y beam transport operatively associated with the frame, the X-Y beam transport being configured to direct a laser beam from a laser beam source to X-Y coordinates relative to the frame; and

a void underlying the removable work table, the void being operatively associated with the X-Y beam transport with the removable work surface removed.

[Claim 11] 11. The laser assembly of claim 10 further comprising a fixture within the void for supporting a work piece in operative association with the X-Y beam transport.

[Claim 12] 12. The laser assembly of claim 10 further comprising:

a Z axis control mechanism for moving the work table along a Z axis normal to the work surface plane relative to the X-Y beam transport between a proximal position near the X-Y beam transport and a distal position away from the X-Y beam transport; and

a redirectable exhaust having an exhaust inlet operatively associated with the work table for transitioning exhausting above or below the work surface as the work table is moved from the distal position to the proximal position along the Z axis.

[Claim 13] 13. The laser assembly of claim 10 wherein the redirectable exhaust is configured to exhaust air above the work surface when a work piece is being subjected to an engraving operation and below the work surface when a work piece is being subject to a cutting operation.

[Claim 14] 14. The laser assembly of claim 10 further comprising upper exhaust inlets operatively associated with the work table to exhaust above the work table regardless of its position along the Z axis.

[Claim 15] 15. The laser assembly of claim 10 wherein the redirectable exhaust exhausts below the work platform when a work piece having less than a first select a thickness is operatively associated with the X-Y beam transport and above the work platform when a work piece having greater than a second select thickness is operatively associated with the X-Y beam transport.

[Claim 16] 16. A laser assembly comprising:

a work table having a work surface in a work surface plane;

an X-Y beam transport operatively associated with the work table, the X-Y beam transport being configured to direct a laser beam from a laser beam source to X-Y coordinates, the X-Y beam transport being spaced from the work surface plane a variable distance along a Z axis normal to the work surface plane;

a Z axis control mechanism for moving the work table along a Z axis normal to the plane work surface relative to the X-Y beam transport between a proximal position near the X-Y beam transport and a distal position away from the X-Y beam transport;

a redirectable exhaust having an exhaust inlet operatively associated with the work table for transitioning exhausting above or below the work surface as the work table is moved from the distal position to the proximal position along the Z axis.

[Claim 17] 17. The laser assembly of claim 16 wherein the redirectable exhaust is configured to exhaust air above the work surface when a work piece is being subjected to an engraving operation and below the work surface when a work piece is being subject to a cutting operation.

[Claim 18] 18. The laser assembly of claim 16 further comprising a frame supporting the work table, the frame being operatively associated with the Z axis control for movement along the Z axis and the redirectable exhaust further comprises a planar wall wherein the exhaust inlet is located and fixed along the Z axis, a frame inlet in the frame below the work table and an exhaust tube having a first end attached in fluid communication with the frame inlet and a second end abutting the planar wall, the redirectable exhaust being configured so that the second end of the exhaust tube is in fluid communication with the exhaust port with the work surface in the proximal position and out of fluid communication with the exhaust port with the work surface in the distal position.

[Claim 19] 19. The laser assembly of claim 18 wherein the exhaust tube is axially rigid and the first end of the exhaust tube is attached to the frame to extend axially from the frame and to move along the Z axis with the frame.

[Claim 20] 20. The laser assembly of claim 19 further comprising a spring biasing the second end of the exhaust tube into abutment with the planar wall.

[Claim 21] 21. The laser assembly of claim 20 further comprising a bearing attached to the frame and surrounding the frame inlet slidably receiving the exhaust tube, the redirectable exhaust tube further having an annular flange at its second end, the spring being received between the bearing and the annular flange.

[Claim 22] 22. The laser assembly of claim 21 further comprising an exhaust slide plate on the planar wall with the exhaust inlet defined in the exhaust slide plate, the second end of the exhaust tube contacting the exhaust slide plate.

[Claim 23] 23. The laser assembly of claim 21 wherein the exhaust tube is made of metal and the exhaust slide plate is made of a low coefficient of friction polymer.

[Claim 24] 24. The laser assembly of claim 16 further comprising upper exhaust inlets operatively associated with the work table to exhaust above the work table regardless of its position along the Z axis.

[Claim 25] 25. The laser assembly of claim 16 wherein the redirectable exhaust exhausts below the work platform when a work piece having less than a first select thickness is operatively associated with the X-Y beam transport and above the work platform when a work piece having greater than a second select thickness is operatively associated with the X-Y beam transport.

[Claim 26] 26. The laser assembly of claim 16 further comprising a frame configured for supporting the work table with the work surface in the work surface plane defined by X-Y axes, the work table being releasably attached to the frame.

[Claim 27] 27. The laser assembly of claim 26 further comprising a void underlying the work table, the void being operatively associated with the X-Y beam transport with the planar work surface removed from the frame.

[Claim 28] 28. A method of exhausting fumes from a laser assembly comprising a housing containing an X-Y beam transport in operative association with a laser beam source and a work table having a work surface, the work table being movable along a Z axis relative to the X-Y beam transport for engraving or cutting of work pieces of varying dimensions along the Z axis, the method comprising:

placing a work piece on the work surface;

adjusting the position of the work table along the Z axis to bring the work piece into operative association with the X-Y beam transport; and

automatically selectively exhausting air below the work table as a function of the thickness of the work piece along the Z axis.

[Claim 29] 29. The method of claim 28 further comprising automatically selectively exhausting air below the work table when the work piece has a thickness of less than 1.7 inch along the Z axis.

[Claim 30] 30. The method of claim 28 further comprising automatically selectively not exhausting air below the work table when the work piece has a thickness of more than 1.7 inch along the Z axis.